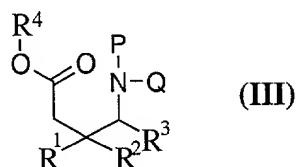


CLAIMS:

1. A compound of the formula (III)



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in which:

P is hydrogen or methyl;

Q is a labile amine- or amide-forming organic group that becomes  
10 removed in the human or animal body;

R<sup>1</sup> is straight or branched C<sub>2</sub> – C<sub>6</sub> alkyl, C<sub>3</sub> – C<sub>6</sub> cycloalkyl or phenyl;

R<sup>2</sup> is hydrogen or methyl; and

R<sup>3</sup> is hydrogen, methyl or carboxyl; and

15 R<sup>4</sup> is hydrogen or a labile ester-forming group selected from substituted and unsubstituted C<sub>1</sub> – C<sub>6</sub> alkyl, benzyl and phenyl groups that become removed in the human or animal body,

or a pharmaceutically acceptable salt of any salt-forming compound within the above class,

but excluding compounds in which R<sub>1</sub> is phenyl and R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are  
20 each hydrogen.

2. The compound of claim 1, in which R<sup>4</sup> is hydrogen.

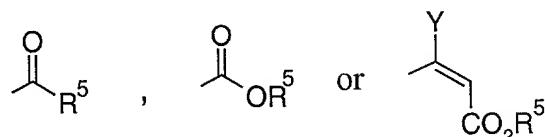
3. The compound of claim 1, in which R<sup>4</sup> is other than hydrogen and is more  
25 labile than Q.

4. The compound of claim 3, in which R<sup>4</sup> is methyl or *t*-butyl.

5. The compound of claim 1, wherein Q can be removed hydrolytically under physiological conditions.

6. The compound of claim 1, wherein Q can be removed enzymatically under  
5 physiological conditions.

7. The compound of claim 1, wherein Q is



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in which:

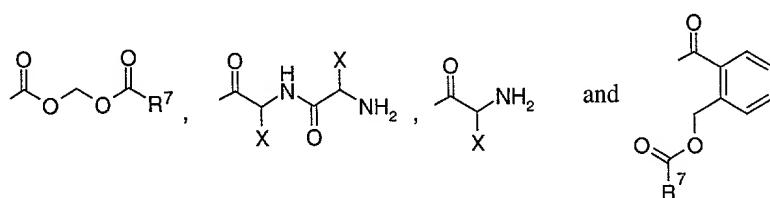
R<sup>5</sup> is hydrogen, straight or branched chain C<sub>1</sub> – C<sub>6</sub> alkyl, phenyl or benzyl in which the benzene ring may be substituted or unsubstituted; and

Y is hydrogen, straight or branched chain C<sub>1</sub> – C<sub>6</sub> alkyl, or -CH<sub>2</sub>CO<sub>2</sub>R<sup>6</sup> in  
15 which R<sup>6</sup> represents straight or branched chain C<sub>1</sub> – C<sub>6</sub> alkyl.

8. The compound of claim 7, wherein R<sup>5</sup> represents *t*-butyl, benzyl or phenyl.

9. The compound of claim 1, wherein Q is selected from

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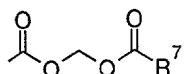


in which:

R<sup>7</sup> is hydrogen, straight or branched chain C<sub>1</sub> – C<sub>6</sub> alkyl, phenyl or benzyl in which either or each benzene ring may be substituted or unsubstituted; and

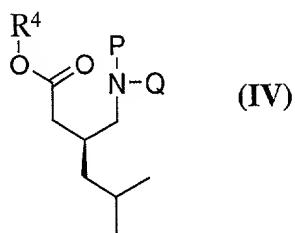
25 X represents a phenyl group or any of the side chains of the 20 naturally encoded  $\alpha$ -amino acids.

10. The compound of claim 1, wherein Q is



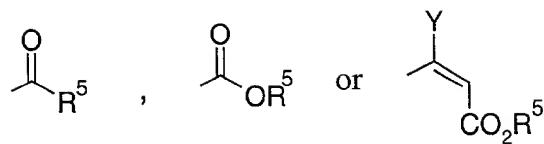
wherein R<sup>7</sup> is methyl, *t*-butyl or phenyl.

5 11. A compound of the formula (IV)



in which P, Q and R<sup>4</sup> have the meanings given in claim 1, or a  
10 pharmaceutically acceptable salt of any salt-forming compound within the above class.

12. The compound of claim 11, in which R<sup>4</sup> is hydrogen.
- 15 13. The compound of claim 11, in which R<sup>4</sup> is other than hydrogen and is more labile than Q.
14. The compound of claim 13, in which R<sup>4</sup> is methyl or *t*-butyl.
- 20 15. The compound of claim 11, wherein Q can be removed hydrolytically under physiological conditions.
16. The compound of claim 11, wherein Q can be removed enzymatically under physiological conditions.
- 25 17. The compound of claim 11, wherein Q is

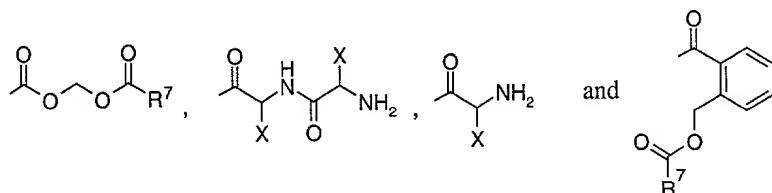


in which:

- R<sup>5</sup> is hydrogen, straight or branched chain C<sub>1</sub> – C<sub>6</sub> alkyl, phenyl or benzyl  
 5 in which the benzene ring may be substituted or unsubstituted; and  
 Y is hydrogen, straight or branched chain C<sub>1</sub> – C<sub>6</sub> alkyl, or -CH<sub>2</sub>CO<sub>2</sub>R<sup>6</sup> in  
 which R<sup>6</sup> represents straight or branched chain C<sub>1</sub> – C<sub>6</sub> alkyl.

18. The compound of claim 17, wherein R<sup>5</sup> represents *t*-butyl, benzyl or  
 10 phenyl.

19. The compound of claim 11, wherein Q is selected from



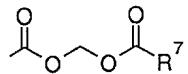
- 15 in which:

R<sup>7</sup> is hydrogen, straight or branched chain C<sub>1</sub> – C<sub>6</sub> alkyl, phenyl or benzyl  
 in which either or each benzene ring may be substituted or unsubstituted; and

X represents a phenyl group or any of the side chains of the 20 naturally  
 encoded  $\alpha$ -amino acids.

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20. The compound of claim 11, wherein Q is



wherein R<sup>7</sup> is methyl, *t*-butyl or phenyl.

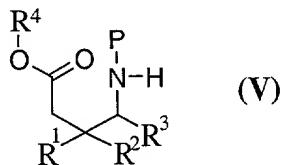
- 25 21. A compound selected from

- (S)-3-(Benzoylaminomethyl)-5-methylhexanoic acid;  
 (S)-Benzyl 3-(acylaminomethyl)-5-methylhexanoate;  
 (S)-3-[*N*-(acetoxymethyleneoxycarbonyl)aminomethyl]-5-methylhexanoic  
 acid;  
 5 (S)-3-[*N*-((2,2-dimethylpropionyloxy)methyleneoxycarbonyl)-amino-  
 methyl]-5-methylhexanoic acid;  
 (S)-3-[*N*-(benzoyloxymethyleneoxycarbonyl)aminomethyl]-5-methyl-  
 hexanoic acid; and  
 pharmaceutically acceptable salts of any of the above.

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22. A method for making a compound of the formula (III) or salt thereof, as  
 defined in claim 1, above, which comprises:  
 coupling a compound of the formula:

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in which P and R<sup>1</sup> – R<sup>4</sup> have the meanings given in claim 1 and in which said compound is in the form of a free base or an ammonium salt with a compound of the formula

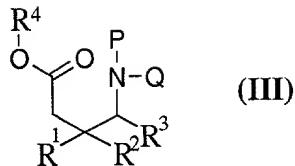


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or QCl where Q has the meaning given in claim 1.

23. The method of claim 22, in which the compound (V) is a carboxylic acid and comprising the further step of esterifying the carboxyl group with a substituted or unsubstituted C<sub>1</sub> – C<sub>6</sub> alkanol, benzyl alcohol or phenol.

24. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically effective amount of a compound of the formula (III)



in which:

- 5        P is hydrogen or methyl;
- Q is a labile amine- or amide-forming organic group that becomes removed in the human or animal body;

- 10      R<sup>1</sup> is straight or branched C<sub>2</sub> – C<sub>6</sub> alkyl, C<sub>3</sub> – C<sub>6</sub> cycloalkyl or phenyl;
- R<sup>2</sup> is hydrogen or methyl; and

- 10      R<sup>3</sup> is hydrogen, methyl or carboxyl; and
- R<sup>4</sup> is hydrogen or a labile ester-forming group selected from substituted and unsubstituted C<sub>1</sub> – C<sub>6</sub> alkyl, benzyl and phenyl groups that become removed in the human or animal body,

- 15      or a pharmaceutically acceptable salt of any salt-forming compound within the above class,
- but excluding compounds in which R<sub>1</sub> is phenyl and R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are each hydrogen.

25.     A method for treating epilepsy comprising administering a therapeutically effective amount of a compound according to claim 1 to a human or animal in need of said treatment.

26.     A method for treating faintness attacks, hypokinesia and cranial disorders comprising administering a therapeutically effective amount of a compound according to claim 1 to a human or animal in need of said treatment.

27.     A method for treating a neurodegenerative disorder comprising administering a therapeutically effective amount of a compound according to claim 1 to a human or animal in need of said treatment.

28. A method for treating depression comprising administering a therapeutically effective amount of a compound according to claim 1 to a human or animal in need of said treatment.

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29. A method for treating anxiety comprising administering a therapeutically effective amount of a compound according to claim 1 to a human or animal in need of said treatment.

10 30. A method for treating panic comprising administering a therapeutically effective amount of a compound according to claim 1 to a human or animal in need of said treatment.

15 31. A method for treating pain comprising administering a therapeutically effective amount of a compound according to claim 1 to a human or animal in need of said treatment.

20 32. A method for treating a neuropathological disorder comprising administering a therapeutically effective amount of a compound according to claim 1 to a human or animal in need of said treatment.

33. A method for treating digestive disorder comprising administering a therapeutically effective amount of a compound according to claim 1 to a human or animal in need of said treatment.

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